QUIZ 8 - MATH 131 Your Name:____

Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

- 1. Perform the following operations in the complex number system and put your answers in standard form:
 - (a) $3i(2+\sqrt{-5})+2i(3-4\sqrt{-1})$

(b) $\frac{5+2i}{5-2i}$

2. (a) Write $z = 9 \operatorname{cis}(\frac{11\pi}{6})$ in the standard form.

(b) Write $z = \sqrt{3} - i$ in trigonometric form.